

IN THE CLAIMS:

1-56 (CANCELLED)

- 1 57. (PREVIOUSLY PRESENTED) A method for discovering and maintaining geo-
2 graphic location information for network devices, the method comprising the steps of:
3 interconnecting a first network device to a particular port of an intermediate net-
4 work device, the first network device including a location generator configured to deter-
5 mine physical coordinates corresponding to the location of the first network device;
6 transmitting, by the first network device, a message including the physical coor-
7 dinates of the first network device to the intermediate network device, the intermediate
8 network device receiving the messages on a particular port;
9 storing the physical coordinates at a memory location of the intermediate network
10 device, the memory location associated with the particular port;
11 subsequent to the step of transmitting, disconnecting the first network device from
12 the particular port and interconnecting a second network device to the particular port, the
13 second network device located at substantially the same location as previously occupied
14 by the first network device; and
15 determining the physical location of the second network device by accessing the
16 memory location associated with the particular port.
- 1 58. (PREVIOUSLY PRESENTED) The method of claim 57 wherein the second net-
2 work device lacks internal capability of determining physical coordinates.

1 59. (PREVIOUSLY PRESENTED) The method of claim 57 further comprising the step
2 of:

3 transmitting the physical coordinates to the second network device in response to
4 a request by the second network device.

1 60. (PREVIOUSLY PRESENTED) The method of claim 57 further comprising the step
2 of:

3 appending the physical coordinates to an emergency call to a third network de-
4 vice, the emergency call originated by the second network device.

1 61. (PREVIOUSLY PRESENTED) The method of claim 57 further comprising the step
2 of:

3 passing the physical coordinates from the intermediate network device to a second
4 intermediate network device, to be stored at the second intermediate network device.

1 62. (PREVIOUSLY PRESENTED) The method of claim 61 wherein the step of passing
2 further comprise the steps of:

3 generating an Internet Control Message Protocol (ICMP) message;
4 loading the physical coordinates into the ICMP message; and
5 sending the ICMP message to the second intermediate network device.

1 63. (PREVIOUSLY PRESENTED) The method of claim 57 wherein the first network
2 device is a portable computing unit and the second network device is a Voice over Inter-
3 net Protocol (VoIP) phone.

1 64. (PREVIOUSLY PRESENTED) The method of claim 63 wherein intermediate net-
2 work device is a network switch.

1 65. (PREVIOUSLY PRESENTED) An intermediate network device configured to
2 maintain geographic location information for network devices, comprising:

3 a geographical location recording/reporting entity configured to communicate
4 with a first network device coupled to a particular port of the intermediate network de-
5 vice, and configured to receive from the first network device physical coordinates corre-
6 sponding to the location of the first network device;

7 a non-volatile memory configured to store the physical coordinates in one or more
8 memory locations associated with the particular port, the physical coordinates thereby
9 associated with the particular port; and

10 the geographical location recording/reporting entity is further configured to, in re-
11 sponse to receiving a request from a second network device coupled to the particular port,
12 assume the second network device is located at substantially the same location as the first
13 network device, and transmit the physical coordinates to the second network device.

1 66. (PREVIOUSLY PRESENTED) The intermediate network device of claim 65
2 wherein the non-volatile memory includes a geo-location table indexed by port number,
3 and wherein the memory locations associated with the particular port are part of the geo-
4 location table.

1 67. (PREVIOUSLY PRESENTED) The intermediate network device of claim 65
2 wherein the geographical location recording/reporting entity is further configured to ap-
3 pend the physical coordinates to an emergency call to a third network device, the emer-
4 gency call originated by the second network device.

1 68. (PREVIOUSLY PRESENTED) A method for discovering and using the geographic
2 location information with a Voice over Internet Protocol (VoIP) telephone, the method
3 comprising the steps of:

4 interconnecting the VoIP telephone to a particular port of a network switch, the
5 particular port associated with a memory entry in a memory of the network switch, the
6 memory entry storing predetermined physical coordinates for use with any network de-
7 vice interconnect to the particular port;

8 receiving the physical coordinates at the VoIP telephone from the intermediate
9 network device; and

10 appending, by the VoIP telephone, the physical coordinates to at least one call
11 message transmitted by the VoIP telephone.

1 69. (PREVIOUSLY PRESENTED) The method of claim 68 wherein the at least one
2 call is part of an emergency call to a Public Safety Answering Point (PSAP).

1 70. (PREVIOUSLY PRESENTED) The method of claim 68 further comprising the step
2 of:

3 requesting, by the VoIP telephone, the physical coordinates from the switch.

1 71. (PREVIOUSLY PRESENTED) The method of claim 70 wherein the step of re-
2 questing further comprises the step of:

3 transmitting one or more Internet Control Message Protocol (ICMP) messages to
4 the network switch.

1 72. (PREVIOUSLY PRESENTED) A computer readable medium containing executable
2 program instructions for discovering and using geographic location information with a

3 Voice over Internet Protocol (VoIP) telephone, the executable program instructions com-
4 prising program instructions adapted for:

5 transmitting a message from the VoIP Telephone to a particular port of a network
6 switch that is interconnected to the telephone, the message requesting physical coordi-
7 nates for the VoIP telephone;

8 in response to the message, receiving the physical coordinates from the switch at
9 the VoIP Telephone;

10 appending, by the VoIP telephone, the physical coordinates to an emergency call
11 transmitted by the VoIP telephone.

1 73. (PREVIOUSLY PRESENTED) The computer readable medium of claim 72
2 wherein the emergency call is to a Public Safety Answering Point (PSAP).